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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/666,932	09/17/2003	Kameshwar Poolla	AWS-035	6474
25199	7590	06/20/2006	EXAMINER	
LARRY WILLIAMS 3645 MONTGOMERY DR SANTA ROSA, CA 95405-5212			WACHSMAN, HAL D	
			ART UNIT	PAPER NUMBER
			2857	

DATE MAILED: 06/20/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/666,932

Applicant(s)

POOLLA, KAMESHWAR

Examiner

Hal D. Wachsman

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 17 April 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 13-16 and 18-33 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 13-16 and 18-33 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 17 April 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

1. The reply filed 4-17-06 contains the specification amendment "... Please replace the paragraph on page 1, lines 9-18..." however the paragraph that is being referred to here is located on page 1, lines 11-18. Appropriate correction is required.
2. The replacement Abstract in the reply filed 4-17-06 is objected to because when an Abstract is substantially rewritten, a new Abstract in clean text (no markings) should be submitted accompanied by an instruction for the cancellation of the previous Abstract. Also any new, or replacement Abstract must be submitted on a separate sheet (37 C.F.R. 1.72). Appropriate correction is required.
3. Claims 14-16, 18, 19 and 22-33 are objected to under 37 C.F.R. 1.75(a) for failing to particularly point out and distinctly claim the subject matter which the applicant regards as the invention. Claims 14-16, 18 and 19, cite the "The method of claim 13..." which based upon the preamble of claim 13 from which they depend should be "The computer program product of claim 13...". Claim 22, line 18, cites "the errors" however the antecedent basis is "fitting errors". Claim 22, line 20, cites "the threshold" however the antecedent basis is "predetermined threshold". Claim 24, line 1, cites "the process" however it appears that the antecedent basis is plural. This same type of problem also occurs in claim 29, line 2. Periods are missing from the ends of claims 25-27. Claim 29, line 1, cites "the workpiece" however the antecedent basis appears to be plural. This same type of problem also occurs in claims 30 and 31, line 1. The examiner asks the applicant to better claim the limitations cited above. While the examiner understands the intentions of the applicant he feels confusion could be drawn from the limitations cited above. Appropriate correction is required.

Claim Rejections - 35 USC § 101

4. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

5. Claims 13-16 and 18-33 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. Independent claim 13 cites "A computer program **product** comprising executable code for a method....". However, as a computer program product can be a computer program, the claim can be referring to a computer program per se which is non-statutory under 35 U.S.C. 101. In addition, the claims recite a mathematical algorithm (see specification page 6, lines 29-30, "calculation algorithm", specification page 7, lines 14-15, "numerically differentiating the signature", lines 20-25 fitting using basis functions, specification page 8, lines 11-12, "matching algorithm", for example) the mathematical algorithm being an abstract idea (judicial exception). There is no practical application of this judicial exception in claim 13 because there is no physical transformation in which an article or physical object is transformed to a different state or thing (note: transformation of data is not "physical transformation") and the claimed invention does not produce a useful, concrete, and tangible **result**. The result in claim 13 is "comparing the first data set and second data set using the correspondences from step ii to determine whether the first data set and the second data set match". However, the comparing of data sets is not tangible and this final result is not being conveyed to someone or something such that the usefulness

of knowing whether the first and second data sets match could be realized, and that such information represents a specific, substantial and credible utility. The above with respect to the final result in claim 13 also applies to the final result in independent claims 20 and 22. In independent claims 20 and 22, similarly there is no practical application of the judicial exception (mathematical algorithm) because there is no physical transformation in which an article or physical object is transformed to a different state or thing (note: transformation of data is not "physical transformation") and the claimed invention does not produce a useful, concrete, and tangible **result**. The result in claims 20 and 22 are "comparing the first data set and second data set using the correspondences from step ii to determine whether the first data set and the second data set match". However, the comparing of data sets is not tangible and this final result is not being conveyed to someone or something such that the usefulness of knowing whether the first and second data sets match could be realized, and that such information represents a specific, substantial and credible utility.

6. Applicant's arguments filed 4-17-06 have been fully considered but they are not persuasive with respect to the rejections under 35 U.S.C. 101. First as a result of further review and current Office policy with respect to 35 U.S.C. 101, a rejection under 35 U.S.C. 101 has now been applied to claim 20. On page 16 of the reply the Applicant with respect to the 35 U.S.C. 101 rejections notes a variety of examples of specific applications for the claimed method such as "automatically characterizing semiconductor processing tools using spatially resolved time-series data", "to determine

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when maintenance is required so as to maintain production specifications for process tools", "equipment matching applications so that process tools running the same process produce substantially the same process results", etc. However, with respect to the above the Applicant is arguing unclaimed merits or distinctions.

7. No claims are allowed.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hal D. Wachsman whose telephone number is 571-272-2225. The examiner can normally be reached on Monday to Friday 7:00 A.M. to 4:30 P.M..


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Marc Hoff can be reached on 571-272-2216. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only.

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For more information about the PAIR system, see <http://pair-direct.uspto.gov>.

Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.


Hal D Wachsman
Primary Examiner
Art Unit 2857

HW
June 14, 2006